NEWPORT NIKE MISSILE BATTERY D-57/58
LAUNCH AREA
Newport Road
Carleton
Monroe County
Michigan

HAER No. MI-80-2



PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
Northeast Region
Philadelphia Support Office
U.S. Custom House
200 Chestnut Street
Philadelphia, P.A. 19106

HAER
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# HISTORIC AMERICAN ENGINEERING RECORD

## NEWPORT NIKE MISSILE BATTERY D-57/58, LAUNCH AREA

**HAER NO. MI-80-2**

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| Location: | Newport Road<br>Carleton<br>Monroe County, Michigan<br><br>UTM: Center of Newport NIKE Missile Battery D-57/58:<br>17.304000.4653460<br>USGS Quadrangle: Flat Rock, Michigan, 1 :24,000 |
| Date of Construction: | 1954 (temporary facility) 1956 (permanent facility) |
| Engineer: | United States Army Corps of Engineers with Contractors |
| Architect: | United States Army Corps of Engineers with Contractors |
| Present Owner: | Mr. Wellington Loh<br>Palos Verde Estates, CA |
| Present Use: | Vacant |
| Significance: | The Newport NIKE Missile Battery D-57/58 Launch Area contributes to the significance of the NIKE Missile Battery because it was in this area that the NIKE missiles were assembled, armed, and readied for launching. The Launch Area of NIKE Missile Battery D-57/58 is an intact, physical manifestation of American military history and reflects an important development in the history of American civil air defense. |
| Project Information: | This mitigative document was undertaken in 1994 in accordance with Stipulation I(A)(2) of the Memorandum of Agreement between the Michigan State Historic Preservation Office, the Advisory Council on Historic Preservation, and the Department of the Army, Corps of Engineers, Detroit District. The structures associated with the Newport NIKE Missile Battery D-57/58 Launch Area are scheduled for demolition.<br><br>Dr. John D. Richards, Principle Investigator; Patricia B. Richards, Ann Kowenstrot and Robert J. Watson, Project Archivists with Great Lakes Archaeological Research Center,Inc.; Eric Oxendorf, Project Photographer. |

## NIKE BATTERY D-57/58 BUILDING DESCRIPTIONS - LAUNCH AREA

General Description

The Launch Area of the Newport NIKE Battery is currently owned by Wellington Loh, Jr. It encompasses approximately 19.48 acres enclosed within a chain link fence. The topography of the launch area is relatively flat, and areas on which buildings stand appear to have been built up to slightly higher elevations than characteristic of the original landscape. The launch area contains the original structures remaining from when the base was in operation: a missile assembly building, a warheading building, a generator building, an enlisted men's barracks, two guard shacks, and underground missile silos. All of the buildings are presently structurally unsound and entrance into them to view their interiors was inadvisable.

The Newport NIKE Battery was a dual battery with six missile launchers in the launch area. This contrasts with the more conventional configuration of two or three launchers. These structures were underground magazines where the missiles were stored, poised for operation.

The launch area is in its original configuration and is organized in a way typical of NIKE Launch Areas. The barracks of the launch area are located closest to the entrance to the base and the missile launchers farthest away from the entrance. The remaining launch area buildings are located between the launchers and the barracks building.

A large hexagonal-shaped concrete airstrip is located immediately north of the missile launchers. The airstrip is one of the technological features at the Newport base which is a remnant of the base's earlier use as a naval air station during the years 1942-1946.

All structures within the launch area are connected with concrete walkways and roads. These walkways facilitated the movement of missiles to and from the buildings during the assembly and arming process.

Barracks Building

The launch area barracks was used to house Newport NIKE base personnel, both enlisted and officers. The building was constructed at the north end of the launch area, on top of the remaining tarmac of the naval air station. The barracks of NIKE bases were constructed with little variation according to a set of standardized 1954 plans.[1] Construction was carried out in accordance with modified emergency construction guidelines, which stressed expediency in both materials and construction. Generally, the buildings were long, one-story facilities constructed from 6 inch concrete block on top of a 4 inch concrete slab.[2] Surface finish of walls was kept to a minimum, with no interior finish on the block walls unless necessary for heating purposes.[3] The height of the barracks buildings in launch areas was restricted to less than nine feet so as not to interfere with radar transmissions from the control area.[4] The entrance of the Newport NIKE base launch area barracks is located on the west side of the building, at the southern end. Windows are evenly spaced on the west and east elevations.

Missile Assembly Building

The missile assembly building was used for the hydraulic and electronic testing of the various components of NIKE missiles and their assembly into rocket fuselages. The missile assembly building is a one-story concrete block structure, approximately 40 feet x 40 feet, built on a concrete slab. Large, garage-style overhead doors are located on the northeast and southwest ends of the building. Four windows are evenly spaced along the northwest elevation. On the southeast elevation there is a 9 foot x 40 foot one-story ell, with a sloped flat roof. The ell housed a boiler room, a bathroom, and a first aid room.[5] There is a double doored entrance way on the northwest elevation, and a smaller personnel door on the northeast elevation. A metal fuel oil tank and chimney are located on the exterior of this portion of the assembly building.

Generator Building

The generator building was designed to house a number of diesel powered generators that provided power to the battery. Normally, NIKE bases received power from local utilities, but in the case of an engagement or emergency, the generators provided power, so that the battery was independent of external power sources.[6] The generator building is a one-story concrete block building, approximately 20 x 60 feet, with a flat, slightly sloping roof, constructed on a concrete pad. It consists of two rooms, a generator room, and a switchboard room. A concrete pad and power transformer are located outside of the switchboard room, on the northeast side of the building.

Warhead Building

The warhead building was constructed according to standardized plans and was built in accordance with modified emergency construction guidelines. Massive earthen berms were constructed around the warhead building site perimeter. These berms were intended to contain an explosion in the event that an accident occurred during missile assembly.[7] The warhead building is located at the northwestern end of the launch area. It is constructed from concrete blocks on top of a concrete slab, and has a slightly peaked composition roof. Both a large, garage-style overhead door and a personnel door are located on the southwest and northeast ends of the building.

Guard Shacks

The launch area contains two guard shacks, or sentry boxes. These structures were used to provide shelter to launch area guards during their duty periods. The guard shacks are constructed from concrete blocks on top of a concrete slab. Each guard shack is approximately 5 feet x 7 feet, and has a slightly sloping flat roof. The guard shacks have an entrance door on one side, and windows on the remaining three sides. One of the launch area guard shacks is located at the entrance gate to the launch area, while the other is located adjacent to the missile launcher area.

Underground Missile Storage Structures

There were a total of six separate underground missile storage and launch structures at the Newport NIKE base. Each structure contained a total of four missiles, one in the ready position and three in reserve for reloading. Each missile magazine is defined on the surface by large steel elevator doors enclosed within an area delineated by concrete curb.[8] Each area also contains an entrance hatch to the underground structure, air vents and ventilation vents.

Standardized plans of the missile storage and launch structures indicate that each facility was constructed from 20 inch thick reinforced concrete; each approximately 62 x 81 feet.[9] The missile storage and launch structure consists of two separate rooms, the missile magazine and a personnel room. The magazine is approximately 62 feet x 58 feet, and the personnel room 9 feet x 10 feet. The missile storage and launch structure is entered by way of an above ground hatch which opens to a stairway leading to the magazine. The magazine housed the missiles and the firing apparatus. There is a shallow pit running down the length of the magazine which housed the elevator system used in launching the missiles. Adjacent to this area are concrete slabs on which additional missiles were stored. When reloaded, these missiles were transferred to the launch elevator via a rail system. The personnel room was made of reinforced concrete walls covered with acoustic tile.[10] A steel ladder leading to an escape hatch provided an emergency exit from the personnel room.

## ENDNOTES

1 Historic American Engineering Record. NIKE Missile Battery PR-79. HAER No. RI-37-A, p. 4
2 Sites D-57-58. E.M. Barracks and officers quarters for firing batteries. Floor and foundation plans, schedules, general notes. Plan file # 10369
3 Transcripts of a speech extracted and reproduced from the records of the Office of History. Headquarters, U.S. Army Corps of Engineers. Alexandria, VA 22310-3865
4 Ibid.
5 Sites D-57-58 L. Missile Assembly and Test Building. Plans, Elevations and Sections. Plan file # 10338.
6 Transcripts of a speech extracted and reproduced from the records of the Office of History. Headquarters, U.S. Army Corps of Engineers. Alexandria, VA 22310-3865
7 Ibid.
8 Sites D-57-58 L. Underground Missile Storage Structure-Type "B". Plans. Plan file # 10321.
9 Ibid.
10 Historic American Engineering Record. NIKE Missile Battery PR-79. HAER No. RI-37-A, p. 7.

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